California

Mathematics Grade 4

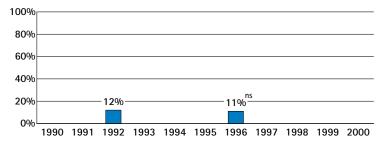
1. Improvement Over Time

Have California's 4th graders improved in mathematics achievement?

Not yet. Between 1992 and 1996, there was no significant change in the percentage of public school 4th graders who met the Goals Panel's performance standard in mathematics.

The Goals Panel has set its performance standard at the two highest levels of achievement — Proficient or Advanced — on the National Assessment of Educational Progress, or NAEP.

Percentage of public school 4th graders at or above Proficient on the NAEP mathematics assessment



ns Interpret with caution. Change was not statistically significant. Mathematics performance will be tested again in 2000.

2. State Comparisons⁺

How did California compare with other states in 4th grade mathematics achievement in public schools in 1996?

33 states had significantly higher percentages of students who were at or above Proficient on NAEP:

Connecticut Minnesota	31% 29%	U.S.,* Alaska, North Carolina, Oregon, Washington	21%
Maine, Wisconsin	27%	Missouri, New York, Pennsylvania	20%
New Jersey, Texas	25%	Virginia, West Virginia, Wyoming	19%
Indiana, Massachusetts, Nebraska,	24%	Rhode Island, Tennessee	17%
North Dakota		Delaware, Hawaii, Kentucky	16%
Michigan, Utah, Vermont	23%	Florida ²	15%
Colorado, Iowa, Maryland, Montana	22%		

9 states had similar percentages of students who were at or above Proficient on NAEP:

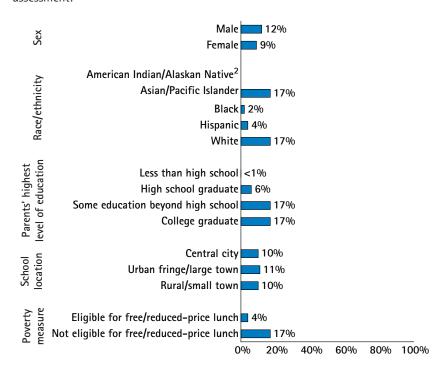
Arizona ²	15%	South Carolina	12%
Nevada	14%	California, Alabama	11%
Arkansas, Georgia, New Mexico	13%	Louisiana, Mississippi	8%

2 states had significantly lower percentages of students who were at or above Proficient on NAEP:

District of Columbia 5% Guam 3%

3. Subgroup Performance

What percentages of public school 4th graders in different subgroups in California were at or above Proficient on the 1996 NAEP mathematics assessment?



[†] The term "state" is used to refer to the 50 states, the District of Columbia, and the territories.

¹ See explanation on pp. 3-4.

² State may appear to be out of place; however, statistically, its placement is correct. See pp. 3-4.

^{*} Figure shown for the U.S. includes both public and nonpublic school data.

¹ Interpret differences between subgroups with caution. See pp. 3-4 and Appendix D.

² Characteristics of the sample do not permit a reliable estimate.

Mathematics Grade 8

California

1. Improvement Over Time

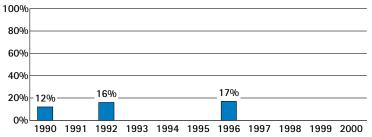


Have California's 8th graders improved in mathematics achievement?

Yes. The percentage of California's public school 8th graders who met the Goals Panel's performance standard in mathematics increased from 12% in 1990, to 17% in 1996.

The Goals Panel has set its performance standard at the two highest levels of achievement — Proficient or Advanced — on the National Assessment of Educational Progress, or NAEP.

Percentage of public school 8th graders at or above Proficient on the NAEP mathematics assessment



Mathematics performance will be tested again in 2000.

2. State Comparisons⁺

How did California compare with other states in 8th grade mathematics achievement in public schools in 1996?

21 states had significantly higher percentages of students who were at or above Proficient on NAEP:

Minnesota	34%	Vermont	27%
North Dakota	33%	Oregon, Washington	26%
Montana, Wisconsin	32%	Colorado	25%
Connecticut, Iowa, Maine, Nebraska	31%	U.S.,* Indiana, Maryland, Utah	24%
Alaska	30%	Missouri, New York, Wyoming	22%
Massachusetts, Michigan	28%		

14 states had similar percentages of students who were at or above Proficient on NAEP:

Texas, Virginia North Carolina, Rhode Island	21% 20%	Georgia, Hawaii, Kentucky Tennessee	16% 15%
Delaware	19%	New Mexico, South Carolina,	14%
Arizona	18%	West Virginia	
California Florida	1 7 %	-	

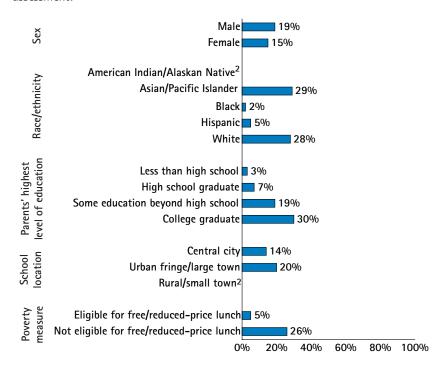
6 states had significantly lower percentages of students who were at or above Proficient on NAEP:

Arkansas	13%	Guam	6%
Alabama	12%	District of Columbia	5%
Louisiana, Mississippi	7%		

[†] The term "state" is used to refer to the 50 states, the District of Columbia, and the territories.

3. Subgroup Performance

What percentages of public school 8th graders in different subgroups in California were at or above Proficient on the 1996 NAEP mathematics assessment?



¹ Interpret differences between subgroups with caution. See pp. 3-4 and Appendix D.

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¹ See explanation on pp. 3-4.

^{*} Figure shown for the U.S. includes both public and nonpublic school data.

² Characteristics of the sample do not permit a reliable estimate.

California

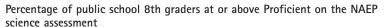
Science Grade 8

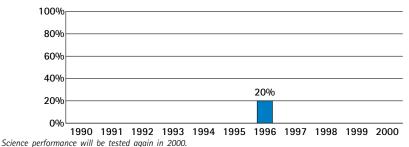
1. Improvement Over Time

Have California's 8th graders improved in science achievement?

In 1996, 20% of California's public school 8th graders met the Goals Panel's performance standard in science. The Goals Panel will report whether science performance has improved over time when science is assessed again in 2000.

The Goals Panel has set its performance standard at the two highest levels of achievement — Proficient or Advanced — on the National Assessment of Educational Progress, or NAEP.





2. State Comparisons⁺

How did California compare with other states in 8th grade science achievement in public schools in 1996?

22 states had significantly higher' percentages of students who were at or above Proficient on NAEP:

Maine, Montana, North Dakota	41%	Alaska	31%
Wisconsin	39%	Indiana	30%
Massachusetts, Minnesota	37%	U.S.*	29 %
Connecticut, Iowa	36%	Missouri	28%
Nebraska	35%	New York, Virginia, Washington	27%
Vermont, Wyoming	34%	Rhode Island	26%
Colorado, Michigan, Oregon, Utah	32%		

14 states had similar percentages of students who were at or above Proficient on NAEP:

Maryland North Carolina Arizona, Kentucky, Texas	25% 24% 23%	California New Mexico Alabama	20% 19% 18%
Arkansas, Tennessee Delaware, Florida, Georgia,	22% 21%	South Carolina	17%
West Virginia			

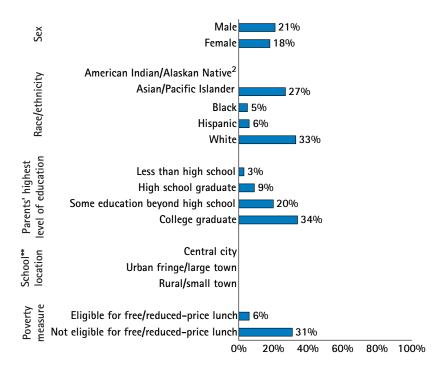
5 states had significantly lower' percentages of students who were at or above Proficient on NAEP:

Hawaii	15%	Guam	7%
Louisiana	13%	District of Columbia	5%
Mississippi	12%		

[†] The term "state" is used to refer to the 50 states, the District of Columbia, and the territories.

3. Subgroup Performance

What percentages of public school 8th graders in different subgroups in California were at or above Proficient on the 1996 NAEP science assessment?



¹ Interpret differences between subgroups with caution. See pp. 3-4 and Appendix D.

¹ See explanation on pp. 3-4.

^{*} Figure shown for the U.S. includes both public and nonpublic school data.

² Characteristics of the sample do not permit a reliable estimate.

^{**} No school location data for science in 1996.

International Comparisons

California

Mathematics Grade 8

Forty-one nations[†] participated in the Third International Mathematics and Science Study (TIMSS) in 8th grade mathematics in 1995. If public school 8th graders in California participated in the TIMSS mathematics assessment, how would their average performance compare to that of students who took TIMSS in these nations?

25 nations would be expected to perform significantly higher:

(Australia) (Israel) (Austria) Japan Belgium - Flemish² Korea (Belaium - French)2 (Netherlands) (Bulgaria) New Zealand Russian Federation Canada Czech Republic Singapore (England) Slovak Republic France (Slovenia) (Germany) Sweden Hong Kong (Switzerland) Hungary (Thailand) Ireland

12 nations* would be expected to perform similarly:

CaliforniaNorwayCyprusPortugal(Denmark)(Romania)(Greece)(Scotland)IcelandSpain(Latvia - LSS)³United States

(Lithuania)

4 nations* would be expected to perform significantly lower:

(Colombia) (Kuwait) Iran, Islamic Republic (South Africa)

Science Grade 8

Forty-one nations[†] participated in the Third International Mathematics and Science Study (TIMSS) in 8th grade science in 1995. If public school 8th graders in California participated in the TIMSS science assessment, how would their average performance compare to that of students who took TIMSS in these nations?

20 nations would be expected to perform significantly higher:

(Australia)Japan(Austria)KoreaBelgium - Flemish²(Netherlands)(Bulgaria)NorwayCanadaRussian FederationCzech RepublicSingapore

Czech Republic Singapore (England) Slovak Republic (Germany) (Slovenia) Hungary Sweden United States

15 nations* would be expected to perform similarly:

California (Lithuania) New Zealand (Denmark) France Portugal (Romania) (Greece) Hong Kong (Scotland) Spain Iceland (Switzerland) (Israel) (Latvia - LSS)3 (Thailand)

6 nations* would be expected to perform significantly lower:

(Belgium – French)² Iran, Islamic Republic

(Colombia) (Kuwait) Cyprus (South Africa)

[†] The term "nation" is used to refer to nations, states, or jurisdictions. Performance for nations is based on public school data only. Nations not meeting international guidelines are shown in parentheses.

¹ See explanation on pp. 3-4.

² The Flemish and French educational systems in Belgium participated separately.

³ Latvia is designated LSS because only Latvian-speaking schools were tested, which represent less than 65% of the population.

[†] The term "nation" is used to refer to nations, states, or jurisdictions. Performance for nations is based on public school data only. Nations not meeting international guidelines are shown in parentheses.

¹ See explanation on pp. 3-4.

² The Flemish and French educational systems in Belgium participated separately.

 $^{^3}$ Latvia is designated LSS because only Latvian-speaking schools were tested, which represent less than 65% of the population.